

CATALOGUE OF THE NAMES
PUBLISHED BY HECTOR LÉVEILLÉ: I

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In 1919 the Royal Botanic Garden obtained through purchase the herbarium of Hector Léveillé. For any student of the flora of Eastern Asia it is an important collection if only for its nomenclatural significance. Between 1894 and 1918, the year of his death, Léveillé published a host of new names, nearly all of them for east asiatic plants and most of them typified by specimens in his herbarium. Type specimens are always important in taxonomy but they are particularly so in the case of the Léveillé herbarium because Léveillé's diagnoses and descriptions were usually grossly inadequate and, what is worse, a very high percentage of his so-called new species were attributed to the wrong genus and, too often, the wrong family. Nor was he innocent of creating his own synonyms and even homonyms. Various adverse comments have been made on Léveillé's work (see Merrill, *Index Rafinesqueanus*, 45: 1949 and Rock in Fedde, *Rep. Sp. Nov.* 13, 352: 1914) and it was once suggested that Léveillé's publications should be officially eliminated and his herbarium destroyed, but this is hardly likely to happen now when many of his names have been taken into general use.

In 1929 Alfred Rehder commenced publication of a review of the ligneous plants from Eastern Asia described by Léveillé. He worked over the type material in Léveillé's herbarium, verified or corrected the names and published the results in the *Journal of the Arnold Arboretum* (10-18, 1929-1937). The herbaceous plants, however, were left untouched and although occasional revisions and monographs have included some of Léveillé's names there has been no complete catalogue and it is only too probable that many epithets have been or are likely to be overlooked because they were attributed by Léveillé to the wrong genus.

This paper is the first of a series in which it is hoped to bring together most of Léveillé's names and indicate our assessment of their correct genus and synonymy. This will be done rather after the style of Rehder's work on the woody plants just mentioned and although Rehder covered each ligneous genus most thoroughly it is some years since his work was published and it is therefore considered wise to include nearly all Léveillé's names in this catalogue. Where nomenclatural treatment has been unaltered since Rehder's work we shall confine ourselves to a brief reference to his publication and to any later relevant literature. In other cases we shall give full synonymy and references to major publications.

A full account of Léveillé's life and work has been published (in *Bull. Acad. Géogr. Bot.* 29, 57-96: 1919) and we need not repeat the details here. He acquired the collections of E. Bodinier, J. Cavalerie, J. Esquirol, U. Faurie, E. E. Maire, T. Taquet and many others, particularly from the Far East. Most of the specimens he cites are to be found in his herbarium but occasionally he apparently based his descriptions on specimens now in other herbaria. Especially is this so in the case of specimens from parts

of the world other than Eastern Asia. The many new French species and varieties described by Lévillé will not be included in this catalogue as none of the types are in Edinburgh. In some cases the type specimens, which had at one time been located in his herbarium in Edinburgh, were sent on loan, and during the war were lost or not returned. Where the types have not been located or examined the names based on them will nevertheless be included in this catalogue together with appropriate comments.

The lay-out of the catalogue is as follows: Families will more or less follow the sequence of Bentham and Hooker's *Genera Plantarum* (1862-83) and within them the genera and species will be treated alphabetically using the name by which we consider the Lévilléan taxon should be correctly known. After this will follow the major and Lévilléan synonyms, the citation of type material and other relevant specimens and, lastly any comments.

There are many hundreds of specimens in the Lévillé herbarium which are not concerned with any of Lévillé's names. Although they are being identified as the work progresses none of these specimens will be cited here.

RANUNCULACEAE

1. *Aconitum barbatum* Pers., Syn. 2, 83 (1807); Hand.-Mazz. in Acta Hort. Gotoburg. 13, 83 (1939); Fletcher & Lauener in Notes R.B.G. Edinb. 20, 198 (1949).

A. luteum Lévl. & Van. in Bull. Acad. Géog. Bot. 11, 46 (1902)—*pro parte quoad inflorescentiam*.

CHINA. Pekin, bois dans le Tang-Kéou (Trappistes), sept. 1888, Bodinier s.n. (holo. *A. luteum* p.p., E).

A. luteum is not so far listed in Index Kewensis although several other new species in the same paper are. *A. luteum* is validly described and may have been overlooked because of its position on the page as a footnote. The specimen contains a flowering stem of *A. barbatum* and two separate leaves of *A. kusnezoffii* Rchb.

2. *Aconitum bullatifolium* Lévl., Cat. Pl. Yunnan, 218 (1917); Hand.-Mazz., Symb. Sin. 7, 293 (1931) et in Acta Hort. Gotoburg. 13, 90 (1939)—*pro parte*; Fletcher & Lauener in Notes R.B.G. Edinb. 20, 190, Pl. cclxvi, fig. 5 (1949).

CHINA. Yunnan, pâtures des mont. à Pe-long-tsin, *Aconitum* nain, vivace, fl. bleues, 3200 m., nov. 1912, Maire s.n. (holo. E).

3. *Aconitum carmichaelii* Debx. in Act. Soc. Linn. Bord. 33, 87 (1879); Hand.-Mazz. in Acta Hort. Gotoburg. 13, 117 (1939); Fletcher & Lauener in Notes R.B.G. Edinb. 20, 200 (1949).
- A. bodinieri* Lévl. & Van. in Bull. Acad. Géog. Bot. 11, 45 (1902); Lévl., Fl. Kouy-Tchéou, 327 (1915).
- A. kusnezoffii* Rchb. var. *bodinieri* (Lévl. & Van.) Fin. & Gagnep. in Bull. Soc. Bot. Fr. 51, 508 (1904) et Contr. Fl. As. Or. 1, 205 (1905); Lévl., Pl. Seu-Tchouen, 142 (1918).

CHINA. Kweichow, environs de Gan-pin, Kouy-yang, etc., commun

partout dans la mont., grandes fleurs bleu-foncées, 20 sept. 1897, *Martin & Bodinier* 1885 (holo. *A. bodinieri*, E).

4. *Aconitum cavaleriei* Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe, **40**, 78 (1905) et in Fedde, Rep. Sp. Nov. **2**, 174 (1906); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 79 (1939); Fletcher & Lauener in Notes R.B.G. Edinb. **20**, 192, Pl. cclxvi, fig. 7 (1949).

"*A. scaposum* Franch."; Lévl. in Bull. Acad. Géog. Bot. **11**, 46 (1902) quoad *Martin & Bodinier* 1886.

"*A. ranunculoideum* Turcz."; Lévl., Fl. Kouy-Tchéou, 328 (1915).

CHINA. Kweichow, Pin-fa, ruisseaux, fl. viol., mai 1903, *Cavalerie* 708 (holo. *A. cavaleriei*, E). Kweichow, environs de Gan-pin, à l'entrée d'une grotte, poussant sur les rochers, rare, fleurs d'un bleu violette, 26 sept. 1897, *Martin & Bodinier* 1886 (E).

M. & B. 1886 was identified by Léveillé & Vaniot as *A. scaposum* before *A. cavaleriei* was described but it matches the type of the latter species.

5. *Aconitum chinense* Paxt., Mag. Bot. **5**, 3, t.3 (1838); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 115 (1939); Fletcher & Lauener in Notes R.B.G. Edinb. **20**, 200 (1949).

A. fauriei Lévl. & Van. in Bull. Soc. Agric. Sci. Arts Sarthe, **40**, 77 (1905) et in Fedde, Rep. Sp. Nov. **2**, 173 (1906); Nakai in Rep. 1st Sc. Exped. Manchoukuo, 1933, sect. 4, **2**, 159 (1935); Kitagawa in Rep. Inst. Sci. Res. Manch. **3**, App. I, 208 (1939); Nakai in Bull. Nat. Sci. Mus. Tokyo, No. 32, 48 (1953).

JAPAN. Aomori, herbier kinashi, oct. 1900, *Faurie* 3 (holo. *A. fauriei*, E).

6. *Aconitum coreanum* (Lévl.) Rap. in Növ. Közl., **6**, 154 (1907) ("koreanum"); Lévl. in Fedde, Rep. Sp. Nov. **7**, 101 (1909); Nakai in Rep. 1st Sc. Exped. Manchoukuo, 1933, sect. 4, **2**, 151 (1935); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 85 (1939); Kitagawa in Rep. Inst. Sci. Res. Manch. **3**, App. I, 209 (1939); Fletcher & Lauener in Notes R.B.G. Edinb. **20**, 200 (1949); Nakai in Bull. Nat. Sci. Mus. Tokyo, No. 32, 16 (1953).

A. delavayi Franch. var. *coreanum* Lévl. in Bull. Acad. Géog. Bot. **11**, 300 (1902).

A. komarovii Steinb. in Komarov, Fl. U.S.S.R. **7**, 191 (1937).

KOREA. In montibus interioribus regionis frequenter, 4 sept. 1901, *Faurie* 28 (holo. *A. coreanum*, E).

7. *Aconitum delavayi* Franch. var. *leiocarpum* Fin. & Gagnep. in Bull. Soc. Bot. Fr. **51**, 507 (1904) et Contr. Fl. As. Or., **1**, 204 (1905); Fletcher & Lauener in Notes R.B.G. Edinb. **20**, 194 (1949).

A. episcopale Lévl. in Fedde, Rep. Sp. Nov. **13**, 341 (1914) et Cat. Pl. Yunnan, 218 (1917).

CHINA. Yunnan, brousse de Lan-gui-tsin, *Aconitum* vivace grimpant, fl. violettes, 3000 m., oct. *Maire* s.n. (holo. *A. episcopale*, E).

8. *Aconitum duclouxii* Lévl. in Fedde, Rep. Sp. Nov. **7**, 99 (1909); Fletcher & Lauener in Notes R.B.G. Edinb. **20**, 189, Pl. cclxvi, fig. 14 (1949).

A. napellus var. *acaule* Fin. & Gagnep. in Bull. Soc. Bot. Fr. **51**, 512 (1904) et Contr. Fl. As. Or. **1**, 209 (1905).

A. acaule (Fin. & Gagnep.) Diels in Notes R.B.G. Edinb. **5**, 270 (1912) excl. descr. et specim.

CHINA. Yunnan, Chao-Chang, près Pin-Tchouan, août 1906, Jean Py 576 (holo. *A. duclouxii*, E).

9. *Aconitum gigas* Lévl. & Van. in Bull. Soc. Bot. Fr. **53**, 389 (1906); Nakai in Bot. Mag. Tokyo, **25**, 53 (1911), **31**, 223 (1917) (sub *A. umbroso* (Korsch.) Kom.), et **49**, 581 (1935); Hara in Bot. Mag. Tokyo, **52**, 623 (1938); Ohwi, Fl. Jap. 533 (1956).

Lycoctonum gigas (Lévl. & Van.) Nakai in Journ. Jap. Bot. **13**, 406 (1937) et in Bull. Nat. Sci. Mus. Tokyo, No. 32, 15 (1953).

JAPAN. Yezo, in silvis Jirafu, juin 1905, Faurie 6934 (holo. *A. gigas*—n.v.). SACHALIN. In humidis silvarum Vladimirof, juill. 1908, Faurie 461 (E).

10. *Aconitum jucundum* Diels in Notes R.B.G. Edinb. **5**, 266 (1912); Hand.-Mazz. in Acta Hort. Gotoburg, **13**, 78 (1939); Fletcher & Lauener in Notes R.B.G. Edinb. **20**, 192, Pl. cclxvi, fig. 8 (1949).

A. lycoctonum var. *circinatum* Lévl. in Fedde, Rep. Sp. Nov. **7**, 258 (1909) et Fl. Kouy-Tchéou, 328 (1915).

CHINA. Kweichow, Pin-fa, toujours près des ruisseaux, août 1908, Cavalerie, s.n. (holo. *A. lycoctonum* var. *circinatum*, E.). Pin-fa, endroits humides, beau violet, cascade, 1905, Cavalerie, s.n.

This is a dwarf form of *A. jucundum* Diels.

11. *Aconitum kusnezoffii* Rchb., Ill. Sp. Acon. Gen., 21 (1827); Lévl. in Bull. Acad. Géog. Bot. **27**, 83 (1917); Hand.-Mazz. in Acta Hort. Gotoburg, **13**, 113 (1939); Fletcher & Lauener in Notes R.B.G. Edinb. **20**, 203 (1950).

A. luteum Lévl. & Van. in Bull. Acad. Géog. Bot., **11**, 46 (1902)—*pro parte, quoad fol.*

CHINA. Pekin, bois dans le Tang-kéou (Trappistes), sept. 1888, Bodinier, s.n. (holo. *A. luteum* p.p., E).

See note under 1, *A. barbatum*.

12. *Aconitum napiforme* Lévl. & Van. in Fedde, Rep. Sp. Nov. **5**, 9 (1908). *A. napellus* L. var. *alimum* Lévl. in Fedde, Rep. Sp. Nov. **7**, 102 (1909).

KOREA. Quelpaert, in silvis, 1200 m., oct. 1906, Faurie 165, 169 (synt. *A. napiforme*, E); in herbidis, oct. 1906, Faurie 166 (holo. *A. napellus* var. *alimum*, E).

13. *Aconitum neo-sachalinense* Lévl. in Fedde, Rep. Sp. Nov. **7**, 101 (1909); Nakai in Bot. Mag. Tokyo **31**, 229 (1917) et in Bull. Nat. Sci. Mus. Tokyo, No. 32, 25 (1953).

SACHALIN. Sine loc., sept. 1908, Faurie (holo. *A. neo-sachalinense*, E).

14. *Aconitum racemosum* Franch. in Journ. de Bot. **8**, 276 (1894); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 131 (1939); Fletcher & Lauener in Notes R.B.G. Edinb. **20**, 204 (1949).

A. coriaceum Lévl. in Fedde, Rep. Sp. Nov. 7, 257 (1909) et Fl. Kouy-Tchéou, 328 (1915).

CHINA. Kweichow, Ma-Jo, rochers humides, 14 nov., *Cavalerie* 3034 (holo. *A. coriaceum*, E).

15. *Aconitum vilmorinianum* Komar. in Fedde, Rep. Sp. Nov. 7, 145 (1909); Hand.-Mazz. in Acta Hort. Gotoburg. 13, 131 (1939); Fletcher & Lauener in Notes R.B.G. Edinb. 20, 205 (1949).

A. mairei Lévl. in Fedde, Rep. Sp. Nov. 13, 341 (1914) et Cat. Pl. Yunnan, 218 (1917).

CHINA. Yunnan, brousse de Lan-gui-tsin, vivace, grimpant, fleurs violettes, 3000 m., oct., *Maire* s.n. (holo. *A. mairei*, E).

16. *Aconitum zigzag* Lévl. & Van. in Bull. Soc. Bot. Fr. 53, 390 (1906); Nakai in Bull. Nat. Sci. Mus. Tokyo, No. 32, 45 (1953).

JAPAN. In Komagatake, 2500 m., sept. 1905, *Faurie* 6935 (holo. *A. zigzag*—n.v.).

This species is queried as synonymous with *A. senanense* Nakai (1908) by Ohwi in his Flora of Japan (534: 1953) but *A. zigzag* Lévl. & Van. was published in 1906.

17. *Anemone begoniifolia* Lévl. & Van. in Bull. Acad. Géog. Bot. 11, 46 (1902) et 15, p. viii (1905); Lévl., Fl. Kouy-Tchéou, 329 (1915); Hand.-Mazz. in Acta Hort. Gotoburg. 13, 179 (1939).

A. esquirolii Lévl. in Fedde, Rep. Sp. Nov. 9, 446 (1911) non 1910.

A. bodinieri Lévl., Fl. Kouy-Tchéou, 329 (1915).

CHINA. Kweichow, Tou-chan, avril 1899, *Cavalerie* & *Bodinier* 2600 (holo. *A. begoniifolia*, E); Grotte de Gai-kia, 3 mai 1910, *Esquirol* 2101 (holo. *A. bodinieri*, E).

Léveillé used the name *A. esquirolii* twice, on the first occasion to describe *Esquirol* 1534, which is *A. rivularis* Buch.-Ham. and on the second occasion to describe *Esquirol* 2101. When writing his Flora of Kweichow he realised he had used the same name twice for different plants and rectified it by using the name *A. bodinieri* for *Esquirol* 2101. However, this collection matches the type of *A. begoniifolia* and *A. bodinieri* falls into synonymy.

18. *Anemone demissa* Hook. f. & Thoms., Fl. Ind. 1, 12 (1855); Lévl., Cat. Pl. Yunnan, 219 (1917); Hand.-Mazz. in Acta Hort. Gotoburg. 13, 180 (1939).

A. bicolor Lévl. in Bull. Acad. Géog. Bot. 24, 42 (1915) et Cat. Pl. Yunnan, 219 (1917).

CHINA. Yunnan, Lan-ngi-tsin, Ranunculus vivace, fl. blanches, violettes à l'extérieur, pâturages des mont., 3100 m., juin 1913, *Maire* s.n. (holo. *A. bicolor*, E).

19. *Anemone hupehensis* Lemoine var. *japonica* (Thunb.) Bowles & Stearn in Journ. Roy. Hort. Soc. 72, 265 (1947).

A. scabiosa Lévl. & Van. in Bull. Acad. Géog. Bot., 11, 47 (1902) (*lusus teratologicus valde abnormalis*).

CHINA. Kweichow, Tou-chan, *Cavalerie* s.n. (holo. *A. scabiosa*, E).

20. *Anemone millefolium* Hemsl. & Wils. in Kew Bull. 149 (1906); Lév., Cat. Pl. Yunnan, 219 (1917); Aichele & Schwegler in Fedde, Rep. Sp. Nov., 60, 117 (1957).

A. mairei Lév. in Bull. Acad. Géog. Bot. 22, 228 (1912) et Cat. Pl. Yunnan, 219 (1917).

CHINA. Yunnan, collines arides, calcaires à Pan Pien Kai, 2500 m., sept. 1911, *Maire* s.n. (holo. *A. mairei*, E).

21. *Anemone obtusiloba* D. Don subsp. *ovalifolia* Brühl in Ann. Roy. Bot. Gard. Calc. 5 (2), 78 (1896); Lauener in Notes R.B.G. Edinb. 23, 189 (1960).

A. geum Lév. in Bull. Acad. Géog. Bot. 25, 25 (1915); Comber in Notes R.B.G. Edinb. 18, 229 (1934); Hand.-Mazz. in Acta Hort. Gotoburg. 13, 177 (1939).

A. bonatiana Lév. var. *geum* (Lév.) Lév., Cat. Pl. Yunnan, 219 (1917).

CHINA. Yunnan, Ta-hai-tse, lagune du haut plateau, Renoncule vivace, toute ciliée, fl. blanches, 3200 m., *Maire* s.n. (holo. *A. geum*, E).

22. *Anemone rivularis* Buch.-Ham. in DC., Reg. Veg. Syst. Nat. 1, 211 (1818); Fin. & Gagnep. in Bull. Soc. Bot. Fr. 51, 72 (1904) et Contr. Fl. As. Or. 1, 84 (1905); Lév., Fl. Kouy-Tchéou, 329 (1915), Cat. Pl. Yunnan, 219 (1917), in Bull. Acad. Géog. Bot. 27, 83, (1917) et Pl. Seu-Tchouen, 144 (1918); Hand.-Mazz. in Acta Hort. Gotoburg. 13, 176 (1939).

"*A. silvestris* L."; Lév. & Van. in Bull. Acad. Géog. Bot. 11, 47 (1902).

A. leveillei Ulbrich in Bot. Jahrb. 36, Beibl. lxxx, 5 (1905); Lév., Fl. Kouy-Tchéou, 329 (1915) et Cat. Pl. Yunnan, 219 (1917).

A. saniculifolia Lév. in Fedde, Rep. Sp. Nov. 7, 383 (1909).

A. esquirolii Lév. & Van. in Fedde, Rep. Sp. Nov. 8, 58 (1910) non Lév. (1911).

CHINA. Yunnan, prairie des montagnes, fl. blanches, mai 1905, *Maire* 390 (synt. *A. saniculifolia*, E); *Maire* 375, 391 (synt. *A. saniculifolia*—n.v.).

Kweichow, Hoang-Tiao-Pa, pelouses, ruisseaux, juin 1909, *Esquirol* 1534 (holo. *A. esquirolii* (1910), E).

In the Edinburgh herbarium there is a Bodinier specimen numbered 1505 from Yunnan (Mont. entre Ma-Kay et Le Hong, 6.4.1897) which bears the names *A. leveillei* Ulbrich & *A. silvestris* L. in Léveillé's handwriting. The type of *A. leveillei* is Bodinier 1909 from Hin-y-hien in Kweichow, which we have not seen.

23. *Anemone trullifolia* Hook. f. & Thoms., Fl. Ind. 1, 22 (1855); Lauener in Notes R.B.G. Edinb. 23, 194 (1960).

A. coelestina Franch. in Bull. Soc. Bot. Fr. 32, 4 (1885); Hand.-Mazz. in Acta Hort. Gotoburg. 13, 178 (1939).

A. bonatiana Lév. in Fedde, Rep. Sp. Nov. 7, 98 (1909) et Cat. Pl. Yunnan, 219 (1917).

CHINA. Yunnan, Lao-Kouy-Chan, près My-Le, *Paul Ngueou* 607 (holo. *A. bonatiana*, E).

24. *Aquilegia fauriei* Lév. in Bull. Acad. Géog. Bot. 11, 300 (1902) non 1906; Munz in Gentes Herbarum, 7, 144 (1946).

KOREA. Chemulpo, collines, en fleurs, juin 1901, *Faurie* 17; collines de Pyeng-yang, juill. 1901, en fruits, *Faurie* 18 (synt.—n.v.).

In his paper Munz points out that this species is described as having pinnate leaves, spicate inflorescence, oblong-acuminate petals, and is not an *Aquilegia*. He has seen no material nor found any reference to another genus.

We have not seen the types either and the species is included here for reference purposes only.

25. *Aquilegia flabellata* Sieb. & Zucc. in Abh. Akad. Muench. ser. 4, 2, 183, fig. 6 (1846); Munz in Gentes Herbarum, 7, 28 (1946); Ohwi, Fl. Jap. 532 (1956).

A. fauriei Lévl. & Van. in Bull. Soc. Bot. Fr. 53, 389 (1906) non Lévl. (1902).

JAPAN. Yeso, in Shiribeshi, 1800 m., rara, juill. 1905, *Faurie* 6937 (holo. *A. fauriei*—n.v.).

26. *Asteropyrum cavaleriei* (Lévl. & Van.) Drumm. & Hutch. in Kew Bull. 156 (1920).

Isopyrum cavaleriei Lévl. & Van. in Bull. Soc. Bot. Fr. 51, 289 (1904); Lévl., Fl. Kouy-Tchéou, 336 (1915).

CHINA. Kweichow, Pin-fa, chutes d'eau, 11 mars 1902, *Cavalerie* 1345 (holo. *A. cavaleriei*, E).

Bodiniera thalictrifolia Lévl. & Van. = *Boenninghausenia albiflora* (Rutaceae).

27. *Callianthemum pimpinelloides* (Don) Hook. f. & Thoms. Fl. Ind. 1, 26 (1855).

Ranunculus pimpinelloides Don in Royle, Ill. Bot. Himal. 53 (1834).

?*Ranunculus* (*Callianthemum*) *bonatii* Lévl. in Fedde, Rep. Sp. Nov. 7, 383 (1909).

CHINA. Yunnan, Lao-Kouy-Chan, près My-Le, 8 mars 1908, *Paul Ngueou ex Ducloux* 887 (holo. *R. bonatii*—n.v.).

Although we have not seen the type there is a specimen bearing the name *Callianthemum "bonatianum"* in Léveillé's handwriting which Handel-Mazzetti has identified as *C. pimpinelloides*. Léveillé's species is therefore placed here but with some doubt.

28. *Caltha fistulosa* Schipcz. in Not. Syst. Herb. Hort. Petrop. 2, 166 (1921); Komarov, Fl. U.S.S.R. 7, 38 (1937).

C. palustris L. var. *barthei* Hance in Ann. Sci. Nat. ser. 8, 5, 205 (1866).

C. palustris L. f. *gigas* Lévl. in Fedde, Rep. Sp. Nov. 7, 102 (1909).

C. barthei (Hance) Koidz. in Fl. Symb. Or. As. 77 (1930).

SACHALIN. Secus aquas vivas Korsakof, juin 1908, *Faurie* 453 (holo. *C. palustris* f. *gigas*, E).

Faurie 453 in Edinburgh was determined and quoted by Koidzumi as *Caltha barthei*.

29. *Cimicifuga foetida* Linn., Syst. Nat. ed. 12, 659 (1767); Huth in Bot. Jahrb. 16, 317 (1892-93).

"*C. dahurica* Huth"; Lévl. in Bull. Acad. Géog. Bot. **11**, 301 (1902).
C. mairei Lévl. in Bull. Acad. Géog. Bot. **25**, 43 (1915) et Cat. Pl. Yunnan, 220 (1917).

CHINA. Yunnan, sous bois de Kiao-me-ti, plante vivace, fl. vertes, 3100 m., nov., *Maire* s.n.; brousse des rochers à Ma-hong, grande spirée vivace, haut 1-90 m., fl. jaunes, étamines blanches, 2800 m., août, *Maire* s.n. (synt. *C. mairei*, E).

KOREA. In Kan-ouen-to, videtur frequenter in declivitatibus, sept. 1901, *Faurie* 220 (E).

Léveillé's holotypes usually bear his handwriting on the label. The two *Maire* specimens in the Edinburgh Harbarium do not, but the labels are those of *C. mairei* and, as indicated in his description, the Kiao-me-ti specimen is in fruit and the other in flower.

30. *Cimicifuga taquetii* Lévl. in Fedde, Rep. Sp. Nov. **9**, 448 (1911).

KOREA. Quelpaert N., in sylvis, 1500 m., oct. 1910, *Taquet* 4106 (holo. *C. taquetii*, E).

This species is distinguished by its 4-5 long-stalked and hairy carpels. The mature carpels are shorter than those of *C. foetida* being more than 7 mm. long and the seeds too are different. In *C. taquetii* they are squamulose in the centre with a distinct ring of larger scales round the margin, whilst in *C. foetida* they are squamose all over.

31. *Clematis brevicaudata* DC. var. *ganpiniana* (Lévl. & Van.) Hand.-Mazz. in Acta Hort. Gotoburg, **13**, 215 (1939).

C. vitalba var. *ganpiniana* Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 167 (1902).

C. parviloba Gardn. & Champ. var. *glabrescens* Finet & Gagnep. in Bull. Soc. Bot. Fr. **50**, 534 (1903) et Contr. Fl. As. Or. **1**, 19 (1905); Lévl., Fl. Kouy-Tchéou, 333 (1915) et Cat. Pl. Yunnan, 222 (1917).

C. parviloba Gardn. & Champ. var. *ganpiniana* (Lévl. & Van.) Rehder in Journ. Arn. Arb. **17**, 319 (1936).

C. ganpiniana (Lévl. & Van.) Tamura in Acta Phytotax. Geobot. **15**, 17 (1953).

CHINA. Kweichow, environs de Gan-pin, liane sous ligneuse, dans les buissons, 10 août 1877, *Martin & Bodinier* 1788 (synt. var. *ganpiniana*, E); dans les haies de la montagne, fleurs blanches, 4 août 1897, *Martin & Bodinier* 1882 (synt. var. *ganpiniana*, E); 4 sept. 1897, *Martin & Bodinier* 1883 (synt. var. *ganpiniana*, E).

In the autographed "Catalogue illustré et alphabétique des plantes du Seu Tchouen", written by Léveillé at Le Mans in 1918, he lists a variety *ganpiniana* of *C. parviloba*. We do not know whether this is a completely new variety or an earlier transference to *C. parviloba* as carried out by Rehder in 1936.

32. *Clematis chinensis* Osbeck; Rehder in Journ. Arn. Arb. **10**, 187 (1929).

C. funebris Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 168 (1902).

C. oligocarpa Lévl. & Van. in Bull. Acad. Géog. Bot. **17**, No. 210-211, p. ii (1907); Lévl., Fl. Kouy-Tchéou, 333 (1915).

C. cavaleriei Lévl. & Porter in Fedde, Rep. Sp. Nov. **9**, 20 (1910); Lévl., Fl. Kouy-Tchéou, 332 (1915).

33. *Clematis clarkeana* Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 170 (1902); Lévl. Fl. Kouy-Tchéou, 332 (1915) et Cat. Pl. Yunnan, 221, fig. 56 (1917); Rehder in Journ. Arn. Arb. **10**, 185 (1929); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 193 (1939).
34. *Clematis connata* DC. Prodr., **1**, 4 (1824); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 192 (1939).
C. buchananiana var. *trullifera* Franch., Pl. Delavay. 3 (1889).
C. trullifera (Franch.) Fin. & Gagnep. in Bull. Soc. Bot. Fr. **50**, 547 (1903) et Contr. Fl. As. Or. **1**, 32 (1905); Lévl., Cat. Pl. Yunnan, 222 (1917); Hand.-Mazz. Symb. Sin. **7**, 319 (1929); Rehder in Journ. Arn. Arb. **17**, 318 (1936).
C. coriigera Lévl. in Fedde, Rep. Sp. Nov. **12**, 281 (1913).
- CHINA. Yunnan, haies, plaine de Tong-tchouan, clematis grim pant à longs rameaux, fl. jaunes, 2500 m., sept., *Maire* s.n. (holo. *C. coriigera*, E).
There are several other Maire collectings of *C. connata* in Herb. Léveillé.
35. *Clematis finetiana* Lévl. & Van. in Bull. Soc. Bot. Fr. **51**, 219 (1904); Lévl., Fl. Kouy-Tchéou, 332 (1915); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 207 (1939).
C. pavoliniana Pampanini in Nuov. Giorn. Bot. Ital. 2 ser. **17**, 290 (1910); Rehder in Journ. Arn. Arb. **10**, 187 (1929) et **18**, 256 (1937); Chun in Sunyatsenia, **1**, 231 (1934).
- CHINA. Kweichow, Pin-fa, fl. blanches, 5 mai 1902, *Cavalerie* 1347; borde des ruisseaux, 5 oct. 1902, *Cavalerie* 605 (synt. *C. finetiana*, E).
Also belonging here are *Cavalerie* 1013 and *Esquirol* 384 (E).
36. *Clematis fusca* Turcz.; Rehder in Journ. Arn. Arb. **10**, 185 (1929).
C. coreana Lévl. in Bull. Acad. Géog. Bot. **11**, 298 (1902).
37. *Clematis gouriana* Roxb. ex DC.; Rehder in Journ. Arn. Arb. **10**, 188 (1929) et **17**, 318 (1936).
C. vitalba L. var. *micrantha* Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 167 (1902); Lévl., Cat. Pl. Yunnan, 222 (1917).
C. martini Lévl. in Bull. Acad. Géog. Bot. **17**, no. 210-211, p. ii (1907) et Fl. Kouy-Tchéou, 333 (1915).
38. *Clematis grata* var. *argenteilucida* (Lévl. & Van.) Rehder in Journ. Arn. Arb. **17**, 318 (1936).
C. vitalba L. var. *argenteilucida* Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 167 (1902).
39. *Clematis ibarensis* Bak. subsp. *edentata* (Baker) H. Perr. in Humbert, Fl. de Madagascar, Fam. 76 (Ranunculaceae), 10 (1950).
C. edentata Bak. in Journ. Linn. Soc. **21**, 318 (1884).
C. perrieri Lévl. in Fedde, Rep. Sp. Nov. **7**, 99 (1909).
C. perrieri Lévl. var. *parvifolia* Lévl. in Fedde, Rep. Sp. Nov. **7**, 100 (1909).
C. bi-perrieri Lévl. in Bull. Acad. Géog. Bot. **27**, 4 (1917).

Types of these names have not been seen. They are presumably in the Paris Herbarium.

40. *Clematis kirilowii* Maxim. var. *chanetii* (Lévl.) Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 205 (1939).
C. chanetii Lévl. in Fedde, Rep. Sp. Nov. **11**, 495 (1913) et in Bull. Acad. Géog. Bot. **27**, 83 (1917); Rehder in Journ. Arn. Arb. **10**, 188 (1929).
CHINA. Hopei, Tche Ly, Kia Chan, août 1910, *Chanet* 560 (holo. *C. chanetii*, E).
41. *Clematis lancifolia* Bur. et Franch. in Journ. de Bot. **5**, 18 (1891); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 204 (1939).
C. duclouxii Lévl. in Fedde, Rep. Sp. Nov. **7**, 97 (1909) et Cat. Pl. Yunnan **220** (1917); Rehder in Journ. Arn. Arb. **10**, 187 (1929).
CHINA. Yunnan, Tso-kio, sur la route de Yunnan-sen, à Houy-ly-tchéou, mars 1907, *Martin* 575 (holo. *C. duclouxii*, E).
42. *Clematis leschenaultiana* DC.; Rehder in Journ. Arn. Arb. **10**, 186 (1929).
C. splendens Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 171 (1902) excl. spec. *Bodinier* 2024.
43. *Clematis loureiriana* DC. var. *subpeltata* (Wall.) Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 219 (1939).
C. subpeltata Wall., Pl. As. Rar. **1**, tab. 30 (1830).
C. smilacifolia Wall. var. *subpeltata* (Wall.) O. Ktze. in Verh. Bot. Ver. Brandenbg. **26**, 121 (1885); Ulbrich in Notizbl. Bot. Gart. Berl. **9**, 227 (1925).
C. esquirolii Lévl. & Van. in Bull. Herb. Boiss. sér. 2, **6**, 504 (1906); Lévl., Fl. Kouy-Tchéou, 332 (1915).
“*C. smilacifolia* Wall.”; Rehder in Journ. Arn. Arb. **10**, 187 (1929).
CHINA. Kweichow, Pin-tong, fleur cramoisie, très caduques, coteaux découverts, 25 dec. 1904, *Esquirol* 264 (holo. *C. esquirolii*, E). Lo-fou, rouge-noir, mars 1909, *Cavalerie* 3578 (E), and Route Lo-fou, Pien-yang, fl. noire-violacée, oct. 1905, *Cavalerie* 2663 (E).
44. *Clematis maximowicziana* Franchet & Savatier var. *robusta* (Carrière) Nakai in Bull. Nat. Sci. Mus. Tokyo, No. 33, 7 (1953).
C. paniculata Thunb. in Trans. Linn. Soc. **2**, 337 (1794) non Gmel. (1791); Lévl., Cat. Pl. Yunnan, 222 (1917).
C. flammula var. *robusta* Carr. in Rev. Hort. **46**, 465, fig. 59 (1874).
C. dioscoreifolia Lévl. & Van. in Fedde, Rep. Sp. Nov. **7**, 339 (1909); Nakai in Journ. Coll. Sci. Univ. Tokyo, **31**, 427 (1911).
C. paniculata Thunb. var. *dioscoreifolia* (Lévl. & Van.) Rehder in Journ. Arn. Arb. **1**, 195 (1920) et **10**, 188 (1929).
C. dioscoreifolia Lévl. & Van. var. *robusta* (Carr.) Rehd. in Journ. Arn. Arb. **26**, 70 (1945).
C. maximowicziana Franch. & Savat. var. *dioscoreifolia* (Lévl. & Van.); Nakai in Bull. Nat. Sci. Mus. Tokyo, No. 31, 27 (1952).
C. terniflora DC. var. *robusta* (Carr.) Tamura in Acta Phytotax. Geobot. **15**, 18 (1953).
KOREA. Quelpaert, in sepibus Hongno, 2 sept. 1908, *Taquet* 502 (holo. *C. dioscoreifolia*, E).

Other specimens from Korea in the Lévillé Herbarium at Edinburgh are *Faurie* 15, 16, 140 and *Taquet* 172. *Faurie* 15 and 140 are cited by Ohwi with his original description of *C. papuligera* Ohwi which is treated by Tamura (l.c.) as *C. terniflora* DC. var. *koreana* (Nak.) Tamura.

Clematis paniculata Thunb. is a later homonym of *C. paniculata* Gmel. which equals *C. indivisa* Willd. from New Zealand. Nakai has pointed out that *C. maximowicziana* is the earliest legitimate name for a form of *C. paniculata* Thunb. Type material of *C. maximowicziana* Franch. & Savat. (*Savatier* 7 in Herb. Paris) shows a plant with small, narrow, biternate cuneate-based leaves; the largest leaflet, although not of a sterile shoot, is 3.5 cm. long \times 1 cm. broad. Carrière's var. *robusta* was described as having the largest leaves of the sterile shoot about 7 cm. long \times 4 cm. broad. To some extent *C. dioscoreifolia* falls between these measurements, and Nakai's reduction in 1952 of Lévillé's plant to a variety of *C. maximowicziana* might be the correct treatment, but the whole species which used to be known as *C. paniculata* Thunb. is very variable and the recognition of varieties on herbarium material alone is of doubtful value.

Tamura places this variety under *C. terniflora* DC., an earlier name than that of Franchet & Savatier, although other authors have treated them as distinct. Finet & Gagnepain (in Bull. Soc. Bot. Fr. **50**, 535: 1903, and Contr. Fl. As. Or. **1**, 20: 1905) have sunk *C. paniculata* Thunb. under *C. recta* L. and cited *Faurie* 16.

45. *Clematis montana* Buch.-Ham. ex DC., Syst. **1**, 164 (1818); Rehder in Journ. Arn. Arb. **10**, 186 (1929); Wang in Acta Phytotax. Sin. **6**, 380 (1957).

C. kuntziana Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 171 (1902).

Finet & Gagnepain referred *C. kuntziana* to *C. montana*. Rehder had not seen the type specimen *Bodinier* 1576. It is in the Edinburgh Herbarium and there is no doubt that Finet & Gagnepain were correct.

46. *Clematis orientalis* Linn. subsp. *simensis* (Fresen.) H. Perr. in Humbert, Fl. Madagascar, Fam. 76 (Ranunculaceae), 13 (1950).

C. simensis Fresen. in Mus. Senck. **2**, 267 (1837).

C. bathiei Lévl. in Bull. Acad. Géog. Bot. **27**, 3 (1917).

The type of this species has not been seen. It is presumably in the Paris Herbarium.

47. *Clematis ranunculoides* Franch. in Bull. Soc. Bot. Fr. **33**, 360 (1886); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 195 (1939).

C. pterantha Dunn in Hook. Icon. Pl. **28**, t. 2713 (1901); Rehder in Journ. Arn. Arb. **10**, 186 (1929); Lévl., Fl. Kouy-Tchéou, 333 (1915);

C. philippiana Lévl. in Bull. Acad. Géog. Bot. **11**, 169 (1902).

CHINA. Kweichow, environs de Lo-pie (Tchen-liu-tchéou), bords de la route, haies, 6 oct. 1897, *Martin & Bodinier* 1992 (holo. *C. philippiana*, E).

48. *Clematis ranunculoides* Franch. var. *tomentosa* Finet & Gagnep.; Rehder in Journ. Arn. Arb. **17**, 317 (1936); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 195 (1939).

C. urophylla Franch. var. *heterophylla* Lévl. in Bull. Acad. Géog. Bot. **17**, no. 210-211, p. ii (1907).

?*C. mairei* Lévl. in Fedde, Rep. Sp. Nov. **7**, 337 (1909) et Cat. Pl. Yunnan, 222, (1917).

Rehder states that the type of *C. mairei* cannot be located in the Herb. Léveillé and according to the description it probably belongs here. We also have been unable so far to locate this type.

49. *Clematis rubifolia* Wright; Rehder in Journ. Arn. Arb. **10**, 186 (1929).

C. splendens Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 171 (1902) excl. spec. Bodinier nos. 2248 et 2248 bis.

50. *Clematis uncinata* Champ.; Lévl., Fl. Kouy-Tchéou, 334 (1915); Rehder in Journ. Arn. Arb. **10**, 188 (1929).

C. drakeana Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 168 (1902).

C. gagnepainiana Lévl. & Van. in Bull. Soc. Bot. Fr. **51**, 219 (1904); Lévl., Fl. Kouy-Tchéou, 332 (1915).

Wang (in Acta Phytotax. Sinica, **6**, 375:1957) queries *C. gagnepainiana* as a possible synonym of *C. uncinata* var. *coriacea* Pamp.

51. *Clematis vaniotii* Lévl. & Port. in Fedde, Rep. Sp. Nov. **9**, 20 (1910); Lévl., Fl. Kouy-Tchéou, 334 (1915); Rehder in Journ. Arn. Arb. **10**, 186 (1929); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 209 (1939).

52. *Coptis teeta* Wall. var. *chinensis* (Franch.) Fin. & Gagnep. in Bull. Soc. Bot. France, **51**, 402 (1904) et Contr. Fl. As. Or. **1**, 145 (1905).

C. chinensis Franch. in Journ. de Bot. **11**, 231 (1897).

C. teeta Wall. var. *chinensis* (Franch.) Fin. & Gagnep. subvar. *rhizomatosa* Lévl. in Fedde, Rep. Sp. Nov. **7**, 258 (1909) et Fl. Kouy-Tchéou, 334 (1915).

CHINA. Kweichow, Ma-Jo, avril-mai 1908, Cavalerie 3031 (holo. *C. teeta* subvar. *rhizomatosa*, E).

Other Chinese material shows that Léveillé's distinction of horizontal rhizomes is of no taxonomic significance.

53. *Delphinium anthriscifolium* Hance in Journ. Bot. **6**, 207 (1868).

D. cavaleriense Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 49 (1902) et **15**, p. vii (1905); Lévl., Fl. Kouy-Tchéou, 335 (1915).

D. cerefolium Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 49 (1902); Lévl., Fl. Kouy-Tchéou, 335 (1915).

CHINA. Kweichow, environs de Tou-chan, belles fleurs bleues, 2 juin 1898, Cavalerie 2344 (holo. *D. cavaleriense*, E); Kouy-Yang, mont du Collège 2 juin 1898, Chaffanjon s.n. (holo. *D. cerefolium*, E).

54. *Delphinium anthriscifolium* Hance var. *calleryi* (Franch.) Fin. & Gagnep. in Bull. Soc. Bot. Fr. **51**, 471 (1904) et Contr. Fl. As. Or. **1**, 168 (1905); Lévl., Fl. Kouy-Tchéou, 335 (1915).

D. calleryi Franch. in Bull. Soc. Linn. Paris, **1**, 329 (1882) et in Bull. Soc. Philom. Paris, **5**, 161 (1893); Huth in Bot. Jahrb. **20**, 423 (1895).

D. robertianum Lévl. & Van. in Bull. Acad. Géog. Bot. **11**, 49 (1902).

D. minutum Lévl. & Van. in Bull. Herb. Boiss. sér. 2, **6**, 505 (1906).

CHINA: Kweichow, 2 mai 1904, *Esquirol* 24 (holo. *D. minutum*, E). Environs de la capitale, sous un grand rocher surplombant la rive d'un torrent près de Kouy-yang, fleurs roses-bleuées, 9 dec. 1897, *Bodinier* 2025 (holo. *D. robertianum*, E).

In the description of *D. minutum* the Esquirol collection number is given as 23. This is obviously a clerical error for 24.

In Fl. Kouy-Tchéou Léveillé cites *Bodinier* 2025 under *D. minutum* but without reference to *D. robertianum*.

Although this is the first time these names have been sunk into synonymy it is not without interest that Léveillé on the same page also lists the number *Bodinier* 2025 under *D. anthriscifolium* var. *calleryi* together with *Bodinier* 2165 (also in Herb. Edinburgh); but he only details the field notes of the latter and gives those for *B.* 2025 with the citation under *D. minutum*.

In the Léveillé herbarium there are also *Cavalerie* 1197 and 2729 named *D. minutum* in Léveillé's hand.

55. ***Delphinium delavayi*** Franch. in Bull. Soc. Bot. Fr. **33**, 379 (1886) et Pl. Delavay. 27 (1889).

D. trichophorum Franch. [var. *lasiostylum* Lévl.] f. *brevungue* Lévl. in Fedde, Rep. Sp. Nov. **7**, 102 (1909) et Cat. Pl. Yunnan, 223 (1917).

CHINA. Yunnan, San-Chan, près Tchen-Hiong, 13 sept. 1905, *Ten* 579 (holo. *D. trichophorum* f. *brevungue*, E).

On the label of the type specimen Léveillé has actually written "var. *brevungue* subvar. *lasiostylum*". No description has been traced of *D. trichophorum* var. *lasiostylum* Lévl.

56. ***Delphinium eriostylum*** Lévl. in Bull. Herb. Boiss. sér. 2, **6**, 505 (1906) et Fl. Kouy-Tchéou, 335 (1915).

CHINA. Kweichow, Kouï-houa, fl. viol. 25 avril 1904, *Cavalerie* 2095 (synt. E); à Ta tsong du Kouy-hoa, au dessus du village, fleur violette, 25 mars, *Esquirol* 141 (synt. E).

57. ***Delphinium grandiflorum*** Linn., Sp. Pl. 531 (1753).

D. bonatii Lévl. in Fedde, Rep. Sp. Nov. **7**, 99 (1909) et Cat. Pl. Yunnan, 223 (1917).

CHINA. Yunnan, Yunnan-sen, Tchong-chan, 29 sept. 1905, *Ducloux* 596 (holo. *D. bonatii*, E).

Maire s.n. (*Delphinium* annuelle, cà-et-là dans les montagnes derrière Tong-tchouan, 2550-2600 m., août) in the Léveillé herbarium bears the name *D. bonatii* in Léveillé's hand but with its broad corymbose inflorescence it appears to be *D. tatsienense* Franch.

58. ***Delphinium maackianum*** Regel var. ***palmatum*** (Lévl.) Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo, **31**, 433 (1911) et in Bull. Nat. Sci. Mus. Tokyo, No. 31, 29 (1952).

D. elatum L. var. *palmatum* Lévl. in Bull. Acad. Géog. Bot. **11**, 300 (1902).

D. lycoctonifolium Lévl. in Fedde, Rep. Sp. Nov. **7**, 100 (1909).

KOREA. In montibus Kan-ouen-to, rara, 4 sept. 1901, *Faurie* 26 (holo. *D. elatum* var. *palmatum* and *D. lycoctonifolium*, E).

Nakai (in Journ. Coll. Sci. Imp. Univ. Tokyo, **26**, 26:1909) places *D. elatum* var. *palmatum* Lévl. in synonymy under *D. elatum* L.

59. *Delphinium tenii* Lévl. in Fedde, Rep. Sp. Nov. 7, 98 (1909).

CHINA. Yunnan, Lou-fou près Tong-tchouan, juin 1906, *Ten* 581 (holo—n.v.).

60. *Delphinium trichophorum* Franch. var. *tibeticum* Lévl., Pl. Seu-Tchouen 149 (1918).

In this autographed work written by Léveillé at Le Mans in 1918, he proposed the above variety ("calcar sepalis brevius"). However, he cites no material or collector and there are no specimens bearing this name in the Léveillé herbarium.

61. *Delphinium yunnanense* (Franch.) Franch. in Bull. Soc. Philom., Paris, 5, 173 (1893); Huth in Bot. Jahrb. 20, 465 (1895); Lévl. Fl. Kouy-Tchéou, 336 (1915).

D. denudatum Wall. var. *yunnanense* Franch. in Plant. Delav. 25 (1889). *D. esquirolii* Lévl. & Van. in Bull. Herb. Boiss. sér. 2, 6, 505 (1906).

CHINA. Kweichow, Shingny-Fou, Kiu-Kia-Tchong, fleur bleue, hauteur 1 mètre et plus; se retrouve en beaucoup d'autres endroits, dauphinelle bleue, *Esquirol* 150; route de Long-Tchang-Kata, dauphinelle bleue, 25 sept., *Esquirol* 153 (synt. *D. esquirolii*, E).

Léveillé (in Fl. Kouy-Tchéou) sunk his own species under *D. yunnanense*. *Esquirol* 744 in the Léveillé Herbarium also bears the name *D. esquirolii* in Léveillé's hand.

Eranthis vaniotiana Lévl. = *Sanicula rubriflora* (Umbelliferae).

62. *Myosurus heldreichii* Lévl. in Bull. Acad. Géog. Bot. 11, 296 (1902); Halácsy, Consp. Fl. Graecae, Supp. I, 2 (1908); Hayek, Prodr. Fl. Penins. Balc. 1, 327 (1924); Rechinger fil. in Denkschr. Akad. Wiss. Wien, Math.-Nat. Klasse, 105, i, ("Fl. Aegaea"), 185 (1943).

The type of this species is not in the Léveillé herbarium at Edinburgh. Its exact status as an Aegean endemic is uncertain.

63. *Paeonia mairei* Lévl. in Bull. Acad. Géog. Bot. 25, 42 (1915); Hand.-Mazz. in Acta Hort. Gotoburg. 13, 38 (1939); F. C. Stern, A Study of the Genus *Paeonia*, 79 (1946).

CHINA. Yunnan, *Paeonia* vivace, en touffes, fl. roses, simples ou semi-doubles, pâtures-brousse du Io-Chan, 3200 m., mai 1913, *Maire* s.n. (holo. *P. mairei*, E). *Paeonia* vivace, tuberculeuse en touffes, fl. rouges, rochers derrière Mo-tsou, 800 m., *Maire* s.n. (E).

64. *Ranunculus acris* Linn. Sp. Pl. 1, 554 (1753).

R. crucilobus Lévl. in Fedde, Rep. Sp. Nov. 11, 32 (1912).

R. crucilobus Lévl. var. *glabratus* Lévl. in Fedde, Rep. Sp. Nov. 11, 32 (1912); Nakai in Bull. Nat. Sci. Mus. Tokyo, No. 31, 26 (1952).

R. crucilobus Lévl. var. *typicus* Nakai in Bull. Nat. Sci. Mus. Tokyo, No. 31, 26 (1952).

KOREA. Quelpaert in agris Mokan, mai 1911, *Taquet* 5342 (holo. *R. crucilobus*, E); in herbidiis Hallaisan, 1500 m., août 1909, *Taquet* 2580 (holo. *R. crucilobus* var. *glabratus*, E).

Although Nakai maintains Léveillé's species and variety and indeed adds a new variety of *R. crucilobus* (var. *chrysotrichus* Nakai) we are of the opinion that the Taquet specimens are merely Korean expressions of *R. acris* sens. lat. It is possible that they may be the same as *R. acris* var. *nipponicus* Hara in which case Léveillé's "*glabratus*" would be the earlier name at varietal rank, unless it has been previously used.

65. *Ranunculus acris* var. *nipponicus* Hara in Journ. Fac. Sci. Tokyo, 6, 51 (1952).

R. novus Lévl. & Van. in Bull. Soc. Bot. Fr. 53, 389 (1906); Matsumura in Index Pl. Jap. 2, 120 (1912); Nakai in Bull. Nat. Sci. Mus. Tokyo No. 31, 26 (1952).

JAPAN. Komagatake, 2300 m., sept. 1905, *Faurie* 6959 (holo. *R. novus*—n.v.).

66. *Ranunculus cantoniensis* DC. Prodr. 1, 43 (1824); Hand.-Mazz., Symb. Sin. 7, 1373 (1936) et in Acta Hort. Gotoburg. 13, 165 (1939); Ohwi, Fl. Jap. 526 (1956).

R. petiolatus Lévl. & Van. in Bull. Soc. Bot. Fr. 53, 389 (1906).

R. silerifolius Lévl. in Fedde, Rep. Sp. Nov. 7, 257 (1909) et Fl. Kouy-Tchéou, 338 (1915); Hand.-Mazz., Symb. Sin. 7, 305 (1931).

KOREA. In humidis Quelpaert Tetchimeri, juill. 1908, *Taquet* 528 (holo. *R. petiolatus*, E).

CHINA. Kweichow, Pin-fa, 20 mai 1908, *Cavalerie* 2792 (holo. *R. silerifolius*, E).

Tamura (in Acta Phytotax. Geobot. 16, 111:1956) sinks *R. petiolatus* under *R. tachiroei* Franch. & Sav. but an examination of the Léveilléan type shows that they differ both in leaf and fruit.

67. *Ranunculus dichotomus* Moc. & Sessé ex DC., Syst. 1, 288 (1818); Lourteig in Mem. Soc. Cienc. Nat. La Salle, 16, 152 (1956).

R. palimbifolius Weddell, Chloris Andina, 2, 303 (1861); Macbride in Publ. Field Mus. Nat. Hist. Chicago, Bot. Ser. 13 (Fl. Peru), 653 (1937).

R. sodiroi Lévl. in Bull. Acad. Géog. Bot. 10, 209 (1901).

TROPICAL AMERICA. Quito, *A. Sodiro* s.n. (holo. *R. sodiroi*—n.v.).

We have not seen the type specimen and do not know where it is located. Macbride presumably worked from Léveillé's description and was followed in this by Miss Lourteig, who kindly informs us that she has made an unsuccessful search for the type in the Paris herbarium. Miss Lourteig is now inclined to believe that *R. sodiroi* is probably a form of *R. praemorsus* H.B.K. ex DC.

68. *Ranunculus diffusus* DC., Prodr. 1, 38 (1824); Hand.-Mazz. Symb. Sin. 7, 302 (1931) et in Acta Hort. Gotoburg. 13, 166 (1939).

R. pseudoparviflorus Lévl. in Fedde, Rep. Sp. Nov. 12, 281 (1913) et Cat. Pl. Yunnan, 226 (1917).

CHINA. Yunnan, vallées humides derrière Tong-Tchouan, 2700 m., *Ranunculus* vivace rampant, fl. jaunes, petites, juin 1912, *Maire* s.n. (holo. *R. pseudoparviflorus*, E).

69. *Ranunculus felixii* Lévl. in Fedde, Rep. Sp. Nov. **12**, 281 (1913) et Cat. Pl. Yunnan, 224 (1917); Hand.-Mazz., Symb. Sin. **7**, 305 (1931) et in Acta Hort. Gotoburg. **13**, 142 (1939).

R. affinis R. Br. var. *flabellatus* Franch., Pl. Delavay. 19 (1889).

CHINA. Yunnan, Lagunes de Ie-Ma-tchouan, 3200 m., *Ranunculus vivax*, fl. jaunes, juill. 1912, Maire s.n. (holo. *R. felixii*, E).

70. *Ranunculus ficariifolius* Lévl. & Van. in Bull. Soc. Bot. Fr. **51**, 289 (1904) et Lévl., Fl. Kouy-Tchéou, 338 (1915); Hand.-Mazz., Symb. Sin. **7**, 298 (1931) et in Acta Hort. Gotoburg. **13**, 163 (1939).

R. ficariifolius Lévl. & Van. var. *crenatus* Lévl. & Van. in Bull. Soc. Bot. Fr. **51**, 289 (1904).

R. ficariifolius Lévl. & Van. var. *ovalifolius* Lévl. & Van. in Fedde, Rep. Sp. Nov. **7**, 102 (1909).

R. bonatianus Ulbr. in Bot. Jahrb. **48**, 621 (1913) non *R. bonatii* Lévl.

R. mairei Lévl. in Fedde, Rep. Sp. Nov. **13**, 341 (1914) non *R. mairei* Lévl. (1913).

R. ficariifolius Lévl. & Van. var. *erythrosepalus* Lévl., Fl. Kouy-Tchéou, 338 (1915).

R. repens L. var. *lopouensis* Lévl. in Bull. Acad. Géog. Bot. **25**, 43 (1915) et Cat. Pl. Yunnan 226 (1917).

R. vaniotii Lévl., Cat., Pl. Yunnan 226 (1917).

R. leveilleanus Ulbr. in Fedde, Rep. Sp. Nov. **28**, 239 (1930).

CHINA. Kweichow, Pin-fa, lieux humides boueux, fl. jaunes, 9 mars 1902, *Cavalerie* 1343 (holo. var. *crenatus*, E). Grande grotte, envelop. exté. d'un rouge veiné, 14 août 1902, *Cavalerie* 629 (holo. *R. ficariifolius* & var. *erythrosepalus*, E); Pin-fa, 1902, *Cavalerie* s.n. (synt. var. *ovalifolius*, E).

Yunnan; Yunnan-sen, plaine, endroits marocageux, 21 avril 1906, *Duclox* 600 (synt. var. *ovalifolius*, E). Vallée humide de Lou-pou, 3000 m., *ranunculus* vivace à demi couché, fl. jaunes petites, juin, *Maire* s.n. (holo. *R. mairei* Lévl. 1914 non Lévl. 1913, *R. leveilleanus*, *R. repens* var. *lopouensis*, *R. vaniotii*, E).

Léveillé & Vaniot based the description of *R. ficariifolius* on *Cavalerie* 629. Later (in Fl. Kouy-Tchéou) Léveillé made this specimen the type of var. *erythrosepalus*. When describing *R. ficariifolius* he made *Cavalerie* 1343 the type of var. *crenatus* but cited it under the species in Fl. Kouy-Tchéou. In 1914, a *Maire* specimen from Lou-pou became the type of a second *R. mairei* Lévl. Léveillé himself realised he had already described a species using this epithet and changed the name to *R. repens* var. *lopouensis* and to *R. vaniotii*. Finally Ulbrich changed it to *R. leveilleanus*.

71. *Ranunculus gmelini* DC., Syst. Veg. **1**, 303 (1818); Hara in Rhodora, **41**, 386 (1939).

R. fauriei Lévl. in Fedde, Rep. Sp. Nov. **7**, 101 (1909).

SACHALIN. In stagnis Vladimirof, juill. 1908, *Faurie* 450 (holo. *R. fauriei*, E).

72. *Ranunculus labordei* Lévl. et Van. in Bull. Acad. Géog. Bot. **11**, 50 (1902); Lévl., Fl. Kouy-Tchéou, 338 (1915); Hand.-Mazz. Symb. Sin. **7**, 301 (1931) et in Acta Hort. Gotoburg. **13**, 164 (1939).

CHINA. Kweichow, environs de Tsin-gay, oct. 1897, *Bodinier & Laborde* s.n. (holo. E).

73. *Ranunculus quelpaertensis* (Lévl.) Nakai in Bot. Mag. Tokyo, **27**, 128 (1913); Hara in Journ. Jap. Bot. **18**, 459 (1942) et **30**, 323 (1955).

R. repens var. *quelpaertensis* Lévl. in Fedde, Rep. Sp. Nov. **7**, 101 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo, **31**, 431 (1911).

R. vernyi Franch. & Sav. in Enum. Pl. Jap. **1**, 8 (1873) *nom nud.* et **2**, 266 (1878); Koidzumi in Bot. Mag. Tokyo **39**, 314 (1925).

R. vernyi Franch. var. *quelpaertensis* (Lévl.) Nakai in Bot. Mag. Tokyo, **42**, 21 (1928).

R. ternatus Thunb. var. *quelpaertensis* (Lévl.) Ohwi, Fl. Jap. 526 (1953) et in Bull. Nat. Sci. Mus. Tokyo, **33**, 72 (1953).

R. hakkodensis Nakai var. *quelpaertensis* (Lévl.) Ohwi & Okuyama in Journ. Jap. Bot. **29**, 368 (1954).

KOREA. Secus aquas Quelpaert, juill. 1907, *Faurie* 1734 (holo. E).

Koidzumi (Fl. Symb. Or.-Asiat. 78:1930) ascribes *R. ternatus* var. *glaber* and var. *hirsutus* to Léveillé but these are varieties described by H. Boissier (Bull. Herb. Boiss. **7**, 594 (1899) and there is no indication that Léveillé (Bull. Acad. Géog. Bot. **9**, 216:1900) was intending to propose new varieties of his own.

Koidzumi incorrectly refers to these varieties as having been described by Boissier under *R. japonicus* Thunb.

Makino (in Journ. Jap. Bot. **7**, 31:1931) also incorrectly attributed the epithet "glaber" to Léveillé when he proposed the combination *R. glaber* (Lévl.) Makino.

74. *Ranunculus sceleratus* Linn. var. *sinensis* Lévl. & Van. in Bull. Herb. Boiss. 2 sér. **6**, 505 (1906); Pampanini in Nuov. Giorn. Bot. Ital. 2 ser. **22**, 289 (1915); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 162 (1939).

R. sceleratus L. var. *depressus* Lévl., Fl. Kouy-Tchéou, 338 (1915), *nomen nudum*.

CHINA. Kweichow, Pin Fa, 1902, *Cavalerie* 1758 (holo.—n.v.).

The specimen of *Cavalerie* 1758 has at one time been located in the Edinburgh Herbarium but was not found in the course of this work so that its true status cannot be evaluated.

75. *Ranunculus ternatus* Thunb. Fl. Jap. 241 (1784); Finet & Gagnep. in Bull. Soc. Bot. Fr. **51**, 321 (1904) et Contr. Fl. As. Or. **1**, 86 (1905); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 167 (1939); Hara in Journ. Jap. Bot. **30**, 323 (1955).

R. extorris Hance in Ann. Sci. Nat., ser. 5, **5**, 204 (1866); Ohwi in Journ. Jap. Bot. **29**, 368 (1954).

R. zuccarinii Miq. in Ann. Mus. Bot. Lugd. Bat. **3**, 5 (1867); Nakai in Bot. Mag. Tokyo, **42**, 22 (1928).

R. coreanus Lévl. in Fedde, Rep. Sp. Nov. **7**, 101 (1909); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo **31**, 431 (1911).

R. taquetii Lévl. in Fedde, Rep. Sp. Nov. **9**, 449 (1911).

R. vernyi var. *japonicus* Nakai in Bot. Mag. Tokyo, **42**, 20 (1928) quoad *R. taquetii* Lévl. in syn.

KOREA. In agris Quelpaert, mai 1907, *Faurie* 1729 (holo. *R. coreanus*, E). Quelpaert, in herbis Mokan, 20 mars 1908, *Taquet* 4551; secus vias Mokan, 21 mars 1908, *Taquet* 4552 (synt. *R. taquetii*, E).

Also in the Edinburgh Herbarium is *Taquet* 5353 which bears the name *R. coreanus* in Lévillé's hand.

76. *Ranunculus trichophyllus* Chaix in Vill., Hist. Pl. Dauph. **1**, 335 (1786). *Batrachium trichophyllum* (Chaix) V. d. Bosch, in Prodr. Fl. Bat. **1**, 5 (1850); Hand.-Mazz. in Acta Hort. Gotoburg. **13**, 167 (1939).

R. trichophyllus Chaix var. *chanetii* Lévl. in Fedde, Rep. Sp. Nov. **11**, 496 (1913).

CHINA. Yunnan, Pe-Tche-Ly, ruisseau des montagnes du Ping-Chan, 15-16 juin 1908, *L. Chanet* 242 (holo. *R. trichophyllus* var. *chanetii*, E).

77. *Ranunculus yunnanensis* Franch. in Bull. Soc. Bot. Fr. **32**, 5 (1885) et Pl. Delavay. 20 (1889); Hand.-Mazz., Symb. Sin. **7**, 309 (1931) et in Acta Hort. Gotoburg. **13**, 144 (1939).

R. mairei Lévl. in Fedde, Rep. Sp. Nov. **12**, 281 (1913) non (1914) et Cat. Pl. Yunnan, 226 (1917).

CHINA. Yunnan, lagunes et plateaux de Lou Pou et de Ta-Hai, 3200 m., *Ranunculus* vivace, fl. jaunes, juill., *Maire* s.n. (holo. *R. mairei* (1913 non 1914), E).

78. *Semiaquilegia adoxoides* (DC.) Makino in Bot. Mag. Tokyo **16**, 119 (1902); Drumm. & Hutch. in Kew Bull. 165 (1920).

Isopyrum tuberosum Lévl. in Fedde, Rep. Sp. Nov. **7**, 340 (1909).

Isopyrum leveilleianum Nakai in Bot. Mag. Tokyo **26**, 323 (1912).

Aquilegia adoxoides (DC.) Ohwi, Fl. Jap. 533 (1953).

KOREA. Quelpaert, Hongno, secus torrentes, avril 1908, *Taquet* 510; Nokatji, in sylvis, mai 1908, *Taquet* 507 (synt. *I. tuberosum*, E); in humidis silvarum Hallaisan, mai 1907, *Faurie* 1724 (iso. *I. leveilleianum*, E).

Taquet 510 has the MSS name *I. coreanum* in Lévillé's handwriting and *Taquet* 507 is annotated *I. tuberosum*. Lévillé evidently decided they were conspecific and validly described them as *I. tuberosum*. In their "Revision of *Isopyrum* and its nearer Allies" Drummond & Hutchinson index *I. leveilleianum* as equalling *Enemion raddeanum*. This is probably a clerical error in the index for they cite *Faurie* 1724 correctly under *Semiaquilegia adoxoides*.

79. *Thalictrum aquilegifolium* Linn. Sp. Pl. **1**, 547 (1753) var. *intermedium* Nakai in Journ. Jap. Bot. **13**, 475 (1937); Hara in Journ. Fac. Sci. Univ. Tokyo, sect. iii, **6**, 55 (1952); Tamura in Acta Phytotax. Geobot. **15**, 81 (1953).

T. anomalum Lévl. et Van. in Bull. Soc. Bot. Fr. **53**, 388 (1906).

T. kamikawense Lévl. et Van. in Bull. Soc. Bot. Fr. **53**, 388 (1906).

JAPAN. Ontake, 2500 m., sept. 1905, *Faurie* 6947 (holo. *T. anomalum*—n.v.).

No specimen is cited by Lévillé & Vaniot under the description of *T. kamikawense*.

Hara says that *T. kamikawense* and *T. anomalum* are connected with *T. aquilegifolium* var. *sibiricum* through intermediate forms. Ohwi

Flora of Japan, 530:1953) treats both var. *intermedium* and var. *sibiricum* as synonymous with *T. aquilegifolium* Linn.

80. ***Thalictrum aquilegifolium* var. *sibiricum*** Rgl. et Til., Fl. Ajan, 23 (1858); Hara in Journ. Fac. Sci. Univ. Tokyo, sect. iii, 6, 55 (1952); Tamura in Acta Phytotax. Geobot. 15, 82 (1953).

T. contortum L. Sp. Pl. 1, 547 (1753).

T. taquetii Lévl. in Fedde, Rep. Sp. Nov. 7, 100 (May 1909).

T. taquetii Lévl. in Fedde, Rep. Sp. Nov. 7, 339 (Dec. 1909), *non praec.*

T. dunnianum Lévl. in Fedde, Rep. Sp. Nov. 8, 549 (1910).

T. aquilegifolium L. sec. Boivin in Journ. Arn. Arb. 26, 117 (1945).

KOREA. Quelpaert, in rupibus Hallaisan, 1800 m., août. 1907, *Faurie* 1720; in herbidis Hallaisan, 1800 m., août 1907, *Faurie* 1721; Ouen-san, août 1901, *Faurie* s.n. (synt. *T. taquetii* (mai 1909) E); in sepibus Hallaisan, 2000 m., 13 août 1908, *Taquet* 508 (holo. *T. taquetii* (dec. 1909) and *T. dunnianum*, E).

Faurie 158 also belongs here.

See note under *T. aquilegifolium* var. *intermedium*. Kitagawa (in Rep. Inst. Sci. Res. Manchoukuo, 3, App. i, 226:1939) treats these Léveilléan names as synonymous with *T. aquilegifolium* Linn. subsp. *asiaticum* (Nakai) Kitagawa.

81. ***Thalictrum cirrhosum* Lévl.** in Fedde, Rep. Sp. Nov. 7, 97 (1909) et Cat. Pl. Yunnan, 226 (1917); Boivin in Journ. Arn. Arb. 26, 112 (1945).

CHINA. Yunnan, Yunnan-Sen, Mont Tchong-Chan, roches, 19 juill. 1905, *Ducloux* 604 (holo. E).

82. ***Thalictrum coreanum* Lévl.** in Bull. Acad. Géog. Bot. 11, 297 (1902); Finet & Gagnep. in Bull. Soc. Bot. Fr. 50, 625 (1903) et Contr. Fl. As. Or. 1, 66 (1905); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo, 26, Art. i, 14 (1909); Boivin in Journ. Arn. Arb. 26, 116 (1945); Kitagawa in Journ. Jap. Bot. 36, 18 (1961).

T. ichangense Lecoy. race *coreanum* (Lévl.) Lévl. in Fedde, Rep. Sp. Nov. 7, 100 (1909).

T. ichangense Lecoy. var. *coreanum* Lévl. apud Tamura in Acta Phytotax. Geobot. 15, 83 (1953).

KOREA. Ouen-san, in petrosis montium, 4 juill. 1906, *Faurie* 150 (E); in rupibus montis des diamants, juin 1906, *Faurie* 151 (E); in montibus interioris regionis, rara videtur, sept. 1901, *Faurie* 23, (holo. E).

In his description of *T. coreanum*, Léveillé did not cite any exsiccatae and the only specimen in Edinburgh to bear the name *T. coreanum* in Léveillé's hand is *Faurie* 23.

83. ***Thalictrum declinatum* Boivin** in Rhodora, 152, 364 (1944).

T. clavatum DC. var. *cavaleriei* Lévl. in Fedde, Rep. Sp. Nov. 7, 257 (1909) et Fl. Kouy-Tchéou, 339 (1915).

CHINA. Kweichow, Ma-jo, avril-mai 1908, *Cavalerie* 3003 (holo. *T. clavatum* var. *cavaleriei*, E).

Also belonging to *T. declinatum* are *Cavalerie* 2431 & 3004. Dr. Boivin has confirmed (in litt.) that these three collections are the same as his species.

84. *Thalictrum delavayi* Franch. in Bull. Soc. Bot. Fr. 33, 367 (1886); Boivin in Journ. Arn. Arb. 26, 113 (1945).

var. *delavayi*.

T. delavayi Franch. var. *parviflorum* Franch. Pl. Delavay. 11 (1889).

T. duclouxii Lévl. in Fedde, Rep. Sp. Nov. 7, 98 (1909) et Fl. Kouy-Tchéou, 329 (1915) et Cat. Pl. Yunnan, 226 (1917).

CHINA. Kweichow, ravines derrière He-hong-Tan, 23 juill. 1904, *Ducloux* 606; sommet du mont Tchong-chan, fl. violettes, 30 juill. 1905, *Ducloux* 781 (synt. *T. duclouxii*, E).

We have seen the Paris types of *T. delavayi* and *T. dipterocarpum* Franch. and agree with Boivin's treatment of *T. duclouxii* as a synonym of *T. delavayi*.

We have examined also several other collections which are intermediate between Franchet's two species, and it appears that these species may also be conspecific although Franchet described them both at the same time. As the question of the status of *T. dipterocarpum* does not fall within the scope of this work, however, we leave it and *T. delavayi* as distinct.

85. *Thalictrum esquirolii* Lévl. & Van. in Bull. Acad. Géog. Bot. 17, no. 210-211, p. ii (1907); Lévl., Fl. Kouy-Tchéou, 339 (1915); Hand.-Mazz., Symb. Sin. 7, 311 (1931) et in Acta Hort. Gotoburg. 13, 171 (1939); Boivin in Journ. Arn. Arb. 26, 111 (1945).

T. tofieldioides Diels in Notes R.B.G. Edinb. 5, 263 (1912) (holo. *Forrest* 2149).

T. nudum Lévl. & Van. ex Hand.-Mazz., Symb. Sin. 7, 311 (1931) pro syn.

CHINA. Kweichow, Tsin Tchen, Gan-pin, lieux humides, 2 mai 1906, *Esquirol* s.n. (holo. *T. esquirolii*, E).

The specimen of *Esquirol* s.n. although cited as *T. esquirolii* by Lévillé only bears the name *T. nudum* in his hand. From his herbarium there are also one Maire collection, *Simeon Ten* 577 and *Ducloux* 603 which belong here.

86. *Thalictrum foeniculaceum* Bunge in Mem. Sav. Étrang. Acad. Sci. St. Petersb. 2, 76 (1833); Drumm. & Hutch. in Kew Bull. 169 (1920); Kitagawa, Rep. Inst. Sci. Res. Manch. 3, App. I, 227 (1939); Sealy in Hook. Icon. Plant. 35, t. 3428 (1943).

Isopyrum trichophyllum Lévl. in Fedde, Rep. Sp. Nov. 9, 224 (1911) et in Bull. Acad. Géog. Bot. 27, 83 (1912) et Cat. Pl. Yunnan, 225, f. 57 (1917).

CHINA. Yunnan, Pe-Tche-Ly, Kiu Yang, août 1910, *L. Chanet* 547 (holo. *T. trichophyllum*, E).

87. *Thalictrum grandisepalum* Lévl. in Bull. Acad. Géog. Bot. 2, 297 (1902); Nakai in Journ. Coll. Sci. Imp. Univ. Tokyo 26, Art. i, 16 (1909); Finet & Gagnep. in Bull. Soc. Bot. Fr. 50, 614 (1903) et Contr. Fl. As. Or. 1, 55 (1905); Boivin in Journ. Arn. Arb. 26, 113 (1945); Tamura in Acta Phytotax. Geobot. 15, 81 (1953).

KOREA. Secus decursus aquarum basi montium, flores juill., août 1901, *Faurie* 20 (holo. *T. grandisepalum*, E).

Faurie 155 also belongs to this species. Boivin places *T. grandisepalum* as a provisional synonym of *T. delavayi* Franch. having seen a fragment

of the type. Examination of the complete specimen leads one to the conclusion that they cannot be conspecific. The achenes of the specimens of *T. grandisepalum* are immature but it is a much stouter plant than *T. delavayi* which is confined to S.W. China.

88. *Thalictrum javanicum* Blume, Bijdr. Fl. Ned. Ind. 2 (1825); Boivin in Journ. Arn. Arb. 26, 115 (1945).

T. argyi Lévl. in Bull. Herb. Boiss. sér. 2, 6, 504 (1906), et in Mem. Real. Acad. Cienc. Art. Barcelona, 12, No. 22, 19 (1916).

CHINA. Kiang-Sou, montagnes, Gong-Chan, d'*Argy* s.n. (holo. *T. argyi*, E).

89. *Thalictrum mairei* Lévl. in Fedde, Rep. Sp. Nov. 7, 339 (1909); Boivin in Journ. Arn. Arb. 26, 117 (1945).

CHINA. Yunnan, vallées des mont. à Pe long tsin, ancolie vivace en touffes dressées, fl. blanc-verdâtre, 3000 m., juin, *Maire* s.n. (E).

Although in his original description Lévillé cites *Maire* 388 (Yunnan montagnes, Sept. 1905) the only specimen in Herb. Lévl. annotated *T. mairei* in Lévillé's own hand is that cited above.

90. *Thalictrum minus* var. *elatum* Lec. in Bull. Soc. Bot. Belg. 24, 202 (1885); Finet & Gagnep. in Bull. Soc. Bot. Fr. 50, 620 (1903) et Contr. Fl. As. Or. 1, 61 (1905); Boivin in Journ. Arn. Arb. 26, 111 (1945).

T. amplissimum Lévl. & Van. in Bull. Acad. Géog. Bot. 11, 51 (1902).

"*T. minus* Linn. var. *majus* Crantz"; Lévl. in Bull. Acad. Géog. Bot. 11, 297 (1902).

T. minus Linn. var. *amplissimum* (Lévl. et Van.) Lévl., Fl. Kouy-Tchéou, 339 (1915)

CHINA. Kweichow, Mont. du Collège, commun dans la montagne, grandes feuilles, 29 juill. 1897, 1 août 1899, *Bodinier* 1733 (holo. *T. amplissimum*, E).

91. *Thalictrum sachalinense* Lec. in Bull. Soc. Bot. Belg. 24, 152, tab. III, fig. 6 (1885); Koidzumi in Bot. Mag. Tokyo 39, 19 (1925); Tamura in Acta Phytotax. Geobot. 15, 82 (1953).

T. fauriei Lévl. & Van. in Bull. Soc. Bot. Fr. 53, 388 (1906) non Lévl. (1909).

T. neo-sachalinense Lévl. in Fedde, Rep. Sp. Nov. 7, 101 (1909).

JAPAN. Insula Yezo in planitie Kamikawa, juill. 1905, *Faurie* 6941 (holo. *T. fauriei* (1906)—n.v.).

SACHALIN. In herbis Vladimirof, juill.-août 1908, *Faurie* 442 (holo. *T. neo-sachalinense*, E).

The achenes in the specimen cited above are distinctly stipitate with stalks approaching 0.5 mm. long. Lecoyer in his original description, whilst illustrating sessile achenes, describes them as sessile or subsessile.

92. *Thalictrum trichopus* Franch. in Bull. Soc. Bot. Fr. 33, 370 (1886); Boivin in Journ. Arn. Arb. 26, 114 (1945).

T. tenii Lévl. in Fedde, Rep. Sp. Nov. 7, 98 (1909) et Cat. Pl. Yunnan, 227 (1917).

CHINA. Yunnan, Lou-Fou, près Tong Tchouan, juin 1907, *Ten* 584 (holo. *T. tenii*, E).

93. *Thalictrum tuberiferum* Maxim. in Bull. Acad. Sci. St. Petersburg. **22**, 227 (1876); Boivin in Journ. Arn. Arb. **26**, 117 (1945).

T. punctatum Lévl. in Fedde, Rep. Sp. Nov. **10**, 376 (1912).

T. fauriei Lévl. in Fedde, Rep. Sp. Nov. **7**, 100 (1909) nec Lévl. & Van. in Bull. Soc. Bot. Fr. **53**, 388 (1906) nec Hayata in Journ. Coll. Sci. Tokyo **22**, 7 (1906).

KOREA. Quelpaert, Hallaisan, in sepibus crateris, 2000 m., 13 août 1908, Taquet 513; secus torrentes, 1500 m., juill. 1909, Taquet 2565 (synt. *T. punctatum*, E); in silvis, juill. 1907, Faurie 1722 (holo. *T. fauriei* (1909), E).

Tamura (in Acta Phytotax. Geobot. **15**, 84:1953), treats these two Lévilléan species as synonyms of *T. filamentosum* Maxim., whilst he follows Ohwi in regarding *T. tuberiferum* Maxim. as a variety of *T. filamentosum* under the name var. *tenerum* (Boiss.) Ohwi (Flora of Japan 531:1953).

The type of *T. fauriei* Lévl. & Van. (1906) is *Faurie* 6941 (see *T. sachalinense* Lecoy.); the syntypes of *T. fauriei* Hayata are from Formosa, and have not been seen in this revision.

94. *Thalictrum virgatum* Hook. f. & Thoms., Fl. Ind. **1**, 14 (1855); Lévl. in Fedde, Rep. Sp. Nov. **7**, 99 (1909) et Cat. Pl. Yunnan, 227 (1917); Boivin in Journ. Arn. Arb. **26**, 115, Pl. I, figs. 25-27 (1945).

T. verticillatum Lévl. in Fedde, Rep. Sp. Nov. **7**, 97 (1909).

CHINA. Yunnan, Yunnan-Sen, sommet du Tchong-Chan, roches, 10 août 1904, Ducloux 602 (holo. *T. verticillatum*, E).

Lévillé himself recognised *T. verticillatum* as conspecific with *T. virgatum* and reduced it accordingly. There are three Maire specimens in Edinburgh which belong here.

95. *Trollius yunnanensis* (Franch.) Ulbrich in Fedde, Rep. Nov. Sp. Beih. **12**, 368 (1922); Stapf in Bot. Mag. **152**, tab. 9143 (1928).

T. pumilus var. *yunnanensis* Franch., Pl. Delavay. 23 (1889).

T. saniculifolius Lévl. in Bull. Acad. Géog. Bot. **25**, 43 (1915) et Cat. Pl. Yunnan, 227 (1917).

CHINA. "Yunnan, sommet du Io-Chan, 3200-3400 m. 1912, E.E. Maire". (No specimen with this field note seen).

In the Lévillé Herbarium at Edinburgh the only specimen annotated in Lévillé's hand is E.E. Maire s.n. "ranunculus vivace, fl. jaunes, grandes, pâturages humides de Lan-ngi-tsin, 3200 m., juillet" but it is named in Lévillé's hand "*Anemone saniculifolia*". There are two specimens from Io-Chan but their field notes do not quite coincide with those of Lévillé's protologue. Is it possible that Lévillé published a combined field note with his original description and the 3 specimens in Edinburgh are syntypes?

Stapf, when dealing with *T. yunnanensis* in the Botanical Magazine regarded *T. saniculifolius* as a possible synonym and in his discussion recognised two forms of *T. yunnanensis* and it may be that Lévillé's species is at most a form with more divided leaves. Further in this connection it is interesting to note that the Edinburgh material of *T. stenopetalus* Stapf has been annotated in the past as an unpublished combination under *T. yunnanensis* at the rank of forma.

96. *Urophyssa henryi* (Oliv.) Ulbrich in Notizbl. Bot. Gart. Berl. **10**, 870 (1929).

Isopyrum henryi Oliv. in Hook. Icon. Pl. t. 1745 (1888); Lév., Fl. Kouy-Tchéou, 336 (1915).

Anemone boissiaei Lév. & Van. in Bull. Acad. Géog. Bot. **11**, 47 (1902).

Aquilegia henryi (Oliv.) Finet & Gagnep. in Bull. Soc. Bot. Fr. **51**, 411 (1904) et Contr. Fl. As. Or. **1**, 154 (1905); Lév. & Van. in Bull. Acad. Géog. Bot. **15**, p. viii (1905).

Isopyrum boissiaei (Lév. & Van.) Ulbr. in Bot. Jahrb. **36**, Beibl. 80, p. 6 (1905).

Semiaquilegia henryi (Oliv.) Drumm. & Hutch. in Kew Bull. 166 (1920). CHINA. Kweichow, entre Gan-pin et Tsin-tchen dans les hautes rocaillles abruptes, fleurs blanches, rare, 17 mars 1898, *Martin & Bodinier* 2120 (holo. *Anemone boissiaei*, E); Pin-fa, rochers de la rivière, Pai-tchen, 17 fév. 1903, *Cavalerie* 864 (incorrectly cited by Ulbrich as the type of *A. boissiaei*).

Doubtful Taxa

Aquilegia fauriei Lév. (1902) non 1906. See no. 24.

Delphinium trichophorum Franch. var. *tibeticum* Lév. See no. 60.

ILLICIAEAE

97. *Illicium majus* Hook. f. & Thoms. in Hook. f., Fl. Brit. Ind. **1**, 40 (1872); A. C. Smith in Sargentia, **7**, 47 (1947).

Glochidion cavaleriei Lév. in Fedde, Rep. Sp. Nov. **12**, 183 (1913) et Fl. Kouy-Tchéou, 163 (1914).

Illicium cavalerie (Lév.) Lév. in Le monde des Plantes, **18**, no. 103, 31 (1916).

"*I. griffithii* Hook. f. & Thoms."; Rehder in Journ. Arn. Arb. **17**, 323 (1936).

CHINA. Kweichow, Pin-fa, ruisseau de La-tong, la graine du Pa-ko, cultivé, 1 août 1902, *Cavalerie* 578 (holo. *I. cavaleriei*, E).

SCHISANDRACEAE

98. *Kadsura coccinea* (Lem.) A. C. Smith in Sargentia, **7**, 166 (1947).

K. chinensis Hance ex Benth., Fl. Hongkong, 8 (1861); Lév., Fl. Kouy-Tchéou, 269 (1915); Rehder in Journ. Arn. Arb. **10**, 190 (1929).

K. cavaleriei Lév. in Fedde, Rep. Sp. Nov. **9**, 459 (1911).

CHINA. Kweichow, Pin-fa, longue liane près des cascades, fleur rouge-rose, rare, juill. 1908, *Cavalerie* 3046 (holo. *K. cavaleriei*, E).

99. *Schisandra henryi* C. B. Clarke in Gard. Chron. ser. 3, **38**, 162, fig. 55 (1905); Rehder in Journ. Arn. Arb. **10**, 191 (1929).

var *henryi*.

S. hypoglauca Lév. in Fedde, Rep. Sp. Nov. **9**, 459 (1911) et Fl. Kouy-Tchéou, 270 (1915) et Cat. Pl. Yunnan, 175 (1916).

S. henryi var. *typica* A. C. Smith in Sargentia, **7**, 114, (1947).

CHINA. Kweichow, liane, fleurs jaunes, 7 mai 1904, *Esquirol* 58 (holo. *S. hypoglauca*, E).

100. *Schisandra propinqua* (Wall.) Baill. var. *sinensis* Oliv. in Hook. Ic. Pl. 18, t. 1715 (1887); Rehder in Journ. Arn. Arb. 10, 191 (1929); A. C. Smith in Sargentia, 7, 153 (1947).

Embelia valbrayi Lévl., Cat. Pl. Yunnan, 177 (1916).

CHINA. Yunnan, rochers de La-kou, 2400 m., arbuste rampant, fl. jaune-orange, juill., *Maire* s.n.; rochers derrière La-kou, 2500 m., arbuste grimpant, toujours vert, fl. jaunes, sept., *Maire* s.n. (synt. *Embelia valbrayi*, E).

In the protologue of *E. valbrayi*, Léveillé uses a composite field note for the two specimens although the name is written in Léveillé's hand only on the second specimen cited above.

MAGNOLIACEAE

101. *Michelia leveilleana* Dandy in Kew Bull. 263 (1927); Rehder in Journ. Arn. Arb. 10, 190 (1929).

M. cavaleriei Lévl. in Fedde, Rep. Sp. Nov. 9, 459 (1911) et Fl. Kouy-Tchéou, 270 (1915), non Finet & Gagnep. (1906).

CHINA. Kweichow, Ma-jo, arbre, fleurs bleues, odorantes, avril 1908, *Cavalerie* 8045; Lou-Mong-Touan, mai 1908, *Cavalerie* 3045 (synt. *Michelia cavaleriei* Lévl., E).

Although, by number, Léveillé only cites *Cavalerie* 3045, two collections are given in the protologue; the specimen of that from Ma-jo, also labelled *M. cavaleriei* in Léveillé's hand, clearly bears the number 8045.

102. *Michelia martinii* (Lévl.) Lévl., Fl. Kouy-Tchéou, 270 (1915); Dandy in Kew Bull. 263 (1927); Rehder in Journ. Arn. Arb. 10, 190 (1929).

Magnolia martinii Lévl. in Bull. Soc. Agric. Sci. Arts Sarthe 39, 321 (1904). *Michelia bodinieri* Finet & Gagnep. in Bull. Soc. Bot. Fr. 53, 574 (1906).

CHINA. Kweichow, environs de Gan-pin, à Leang-chouy-tsin, grand arbre, suspendu à mi-côte au dessus d'un gouffre profond de 300 pieds, fleurs blanc-crème, très rare, 9-20 fev. 1898, *Martin* & *Bodinier* 2066 (holo. *Michelia bodinieri* & *Magnolia martinii*, E).